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ABSTRACT

Federal and state roles in higher education and possible actions and priorities for the federal government with regard to research are considered. Federal sponsorship of research is directed to better inform policy-makers who share responsibilities for the national interest in higher education. Attention is directed to the following concerns: assumptions about the role of higher learning in American society; the national interest in and state responsibilities for higher learning; the strategies that could be proposed for exercising federal responsibilities; the possible contribution to those federal responsibilities of an increased understanding brought about through federally sponsored research; and the most desirable information reporting and research strategy that could be pursued from a federal perspective. Four of the roles that higher learning plays in American society are: the formal learning of the individual; the creation, organization, and dissemination of new knowledge; the socialization process for American adults; and a holding pattern for workers unable to fulfill employment aspirations. Federal responsibilities appropriate to higher learning include: insuring that the market environment of higher learning exhibit certain properties (e.g., equal access to higher learning); and providing opportunities for basic research. State governments are responsible for the creation and charter supervision of colleges and have some authority over the provision of education. Possible ways the National Institute of Education could promote federal and state effectiveness in higher learning and policy oriented research are suggested identifying every several years topics it wishes to emphasize. (SW)

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FEDERAL AND STATE ROLES IN HIGHER EDUCATION: Impact of Federally Sponsored Research on Increased Federal and State Effectiveness*

by
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FEDERAL AND STATE ROLES IN HIGHER EDUCATION:
Impact of Federally Sponsored Research
on Increased Federal and State Effectiveness*

The federal government has several appropriate roles in the area of higher education. Among these is the sponsorship of research aimed at better informing policy makers who share responsibilities for the national interest in higher education. However, to develop a thoughtful federal strategy for informing national policy makers through a research program, one must first be clear about: (a) assumptions about the role of higher learning in the American society; (b)the national interest in and state responsibilities for higher learning; (c) the strategies one could propose for exercising federal responsibilities; (d) the possible contribution to those federal responsibilities of an increased understanding brought about through federally sponsored research; and, (e) therefore, the most desirable information reporting and research strategy which could be pursued from a federal perspective. The subsequent sections of this paper develop these lines of reasoning and, in light of the current political, economic, social and demographic forces impinging upon both higher learning and the governments which support it, the paper contains some suggestions for appropriate actions and priorities for federal leadership and sponsorship of research.

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Surely the overriding objective of any changes in federal actions or initiative in the area of research about the policy context of higher education is to increase the effectiveness of government action as well as institutional and individual decision making. The universe of policy and decision making responsibilities in higher learning is very large, and the efforts of this paper are focused exclusively on federal and state government decision making.

Role of Higher Learning in the American Society

In the context of policy discussions it is often easy to lose track of some of the broader purposes of higher learning in the American society. Here is not the appropriate place to argue the benefits of higher learning to a democratic society including its contribution: to increased productivity of the American economy; to the development of new technologies which allow the United States to retain a competitive environment or competitive edge in the world economy; to national defense; or to a higher quality of life through the arts and humanities. However, I believe that to develop the analysis and discussion of appropriate state and federal policies, it is helpful to identify at least four separate roles which higher learning plays in the American society. Among other formulations, these roles include: the formal learning of individuals; the creation, organization, and dissemination of new knowledge; the socialization process for adults to adapt to the norms and values of the American society; and as a holding pattern for aspiring workers who are currently unable to fulfill their employment aspirations. Let us consider each of these roles in turn.

Formal learning is in the best interest of all parties. From an employer's perspective, increased competence of skilled workers is critical to maintain and to increase productivity. Our economy is becoming increasingly a service economy dependent upon investment in human capital and the skills of individuals to a far greater extent than our previous dependence primarily upon purely physical capital and the strength of individuals. Our more progressive corporations have long recognized the need for a continuing investment in the skills and abilities of their employees. Many union contracts now include the provision of educational benefits with appropriate sharing of the cost between the employee and the employer. The growing number of contractual relationships between business or industry and institutions of higher learning attest to the recognition of a joint purpose being served by formal instructional patterns in meeting the needs of business and industry.

Formal learning is also in the interest of the individuals who participate. The economic return in increased employability which flows from higher levels of skill and higher levels of education provides incentives for individuals to pursue their education. Surely concern about their own development as a complete individual in a variety of ways, including an increased cultural awareness and the ability to appreciate their complex society, also motivates individuals to continue their higher learning.

In the broadest perspective, formal learning is in our society's interest to enable citizens to be better informed, public decisions to

be more thoughtfully considered, and the total scope of economic activity to be expanded through increased productivity, thereby benefitting all citizens. The worsening shortage of talent needed to meet the increased technological demands of our society and our economy and the declining number of youth who will be available to enter the labor force in the coming two decades both give greater emphasis to the need for more effective higher learning.

The creation of new knowledge is essential for any society and economy to progress. Historically and currently, the responsibilities for creating new knowledge are not exclusively lodged with institutions of higher education. Inventors and corporate and government laboratories have all contributed greatly to the development of new knowledge at various periods in history. However, institutions of higher learning have played, and in all likelihood will continue to play, a critically important role not only in the development of new knowledge, but also as a repository of knowledge once created. The classical sense of a "public good" is that one person's use of that good would not diminish the availability of it to any other user. In this sense the knowledge created or catalogued by higher education is one of its truly "public goods" made available to every member of society. Because corporate and government research tend to be classified and not generally available for security reasons university-based research makes probably the greatest contribution of research as a public good readily available and useable by our society.

The socialization of older youth and adults is another role played by institution for higher learning in the American society. In various ways and to varying degrees of success, the American institutions of higher learning attempt to communicate and inculcate the American work ethic, standards of excellence, awareness of and perception of the benefits of cultural puralism, and awareness of and ability to participate effectively in a democratic form of government, ie. taking a personal responsibility for civic progress. We value not only the formal learning and research capacities of institutions of higher learning but also their "co-curricular" activities which develop social and political skills vitally needed by our society.

This socialization process also enables individuals to establish new patterns of social upward mobility which may depart from the experiences of their parents. In the history of the United States, higher learning was often the route of improved social status for immigrant groups which were historically disadvantaged. Virtually all of the evidence suggests that patterns of upward mobility continue to be accessible through higher learning.

The socialization process also includes a sorting function of separating those with distinguished talent from those whose aspirations may not be congruent with their abilities. This encompasses all of the performance areas including music, drama, athletics, and the arts, in addition to the traditional academic area. Business, industry, government, and many other employers depend upon this sorting process

as a basis of recruitment and selection of individuals for managerial and professional posts in their organizations.

A fourth role I will point to is that of a holding pattern for aspiring workers. The American labor force is not always able to absorb in meaningful and preferred employment the full number of individuals seeking that employment. Because of veterans returning in mass from wars, times of rapidly declining economic activity levels, a burgeoning youth population expanding more rapidly than the labor force and, in general, imbalances of labor supply and demand arising for whatever reason can partially be adjusted for through changes in enrollment in higher education. This counter-cyclical nature of higher education provides a very important countervailing force or opportunity for the labor force itself. In times of a shortage of labor, rates of college attendance tend to decline and cooperative working relationships between higher learning and the industrialized sector tend to increase. In times of increasing labor surplus, the opportunity cost of full time attendance declines for individuals and the competitive employment advantages of graduates of higher learning increases; consequently the proportion of individuals enrolling in higher education tends to increase. This countervailing role is very important, stabilizing force for the American economy.

These are roles of higher learning which I would suggest are the more important roles for both federal and state purposes. There are a number of organizations which seek to fulfill some or all of these roles of higher learning. Secondary schools, state supported and

independent colleges and universities, other not-for-profit organizations which may be organized for research, education, or public service purposes, proprietary schools, corporations, other business organizations, the military, and the federal government itself -- all provide one or more of these formal roles in our society. The relationship between these organizations and the roles they play in the area of higher learning is suggested in Table I.

Table I

Role	Organization					
	Secondary Schools	College or University	Other Not for-Profits	Proprietary Schools	Corporation Schools	Military
Formal Learning	X	X	X	X	X	X
Knowledge Creation		X	X		X	X
Adult Socialization		X				X
Holding Task for Aspiring Workers		X				X
Responsible Agents	Local District States	Trustees States	Directors States	Owners Director	Services Federal	
	State			Private - Direct State - Indirect	Federal	

Formal learning is provided in one form or another by all of the types of organizations suggested in this table. All of the roles are provided typically only by either colleges or universities or, perhaps surprisingly, by the military. In reflecting upon the appropriate state or federal policies for higher learning, it is important to think more broadly than colleges and universities, and more broadly than formal instruction. Indeed several types of organizations compete for the responsibility and the opportunity to serve the American society in each of these roles, and public policy must take not only cognizance of this competition but, hopefully, also take advantage of this competition.

One other dimension suggested in Table I is the level of government which is responsible for the organization which provide the services needed by these various roles. The military is clearly under the direct supervision of the federal government, but all other types of organizations are either directly or indirectly supervised by state governments. This suggest that the responsibility for the orchestration of public policy and private resources which enable higher learning best to fulfill the roles identified is a national responsiblity shared by state governments. For the fulfillment of national objectives in higher learning the federal government must depend upon the collective actions of the several states. Correspondingly, states need a more comprehensive perspective of the types of organizations to which they may turn for the satisfaction of the various roles which are of value to them.

National Interest in Higher Learning

It is the role of the Congress of the United States to articulate national policies and to choose to accept certain federal responsibilities for the accomplishment of the national objectives. The areas of national defense and international relations are wholly areas of national policy and federal responsibility. The provison of medical care for the poor has been identified as a national policy and accepted as a federal responsibility. Although Congress has enacted over 430 federal domestic assistance programs providing funds to higher education, it has neither established nor articulated a thorough comprehensive national policy for higher learning. Congress has chosen a limited federal role concentrating primarily on student assistance and the sponsorship of project oriented research. Furthermore, institutions of higher education have often been viewed by the federal government as instruments for the accomplishments of purposes which are beyond and outside of higher learning, such as urban development or racial desegregation.

With an understanding that every national interest does not require a federal program or federal funding to address that interest, it is important to consider the characteristics of appropriate federal responses to the national interest in higher learning. Let me suggest three federal responsibilities appropriate to higher learning. These areas of responsibility are not unique to higher learning but are also appropriate to a variety of other areas of social concerns including health care, housing, retirement programs, or other aspects of the general services economy. The first area appropriate for federal

responsibility is to insure that the market environment of higher learning exhibit certain properties: equal access to higher learning, independent of an individual's sex, race, ethnicity, religion, national origin, age, and, increasingly, income; at least a minimal amount of diversity to enable adequate choice by individuals and organizations seeking the services of higher learning; the increased efficiency of organizations offering services in higher learning to increase the chances of their long-term survival and to make the most effective and efficient use of public resources; and information adequate for consumers to make truly informed choices. These market properties affect the pattern of competition and the choices by individuals and organizations seeking services from higher learning organizations without asking the federal government to make allocative decisions of which individuals enroll in which particular institutions or which research specialties and patterns of expertise should be developed in particular institutions.

The second area appropriate for federal responsibility is that of the provision of "public goods". It is very likely that states and individual organizations will underinvest in the provision of public goods precisely because their benefits cannot be restricted exclusively to those purchasing the research or other activities which produce these public goods. It is for this reason, as well as the inherent nature of research and other public goods, that the federal responsibilities are paramount in this area. It is important that basic research be distinguished from the project-oriented research typically pursued through contracts with various organizations for

producing a pre-defined product. Basic research is the exploration of concepts and ideas at the direction of a scholar without known or predictable outcomes. Research findings, new orchestral arrangements, the development of new works of art, and new ideas are discoveries that cannot be restricted in the receipt of benefits and, thus, enrich us all.

A third area appropriate for federal responsibility in higher learning is to purchase those services from organizations specializing in one or more roles in higher learning which are felt to be needed by the federal government. For example, the federal government now purchases: contract training for CETA programs; the management of research laboratories; the provision of community services to third parties by institutions of higher learning; training for government workers in a variety of management, language, and vocational fields; consulting services on wide variety of government projects; the production of some supplies and materials, and undoubtedly dozens of other examples. In these respects, the relationship between the federal government and institutions of higher learning is that of a business relationship, with little direct concern given to the increasing effectiveness of organizations providing the higher learning activities or to the inter-relationship of the various roles which an organization fulfills.

In the past several years there has been an increasing emphasis given to the first area of federal responsibility: market regulation and advancement. A diminishing interest in the provision of public goods has resulted as federal monitary support for research has declined both

proportionatly and in real terms. Simultaneously, the federal government has manifested an increasing interest in the business and regulatory nature of the relationship in the direct purchase of services, clarifying that role as one of truly a contractual nature.

State Responsibilities for Higher Learning

Meanwhile the awareness of the importance of state responsibilities for higher learning has been increasing, in part because the changing pressures on public policy at state and federal levels have brought increasing attention to the area of higher learning in the last two decades. Federal initiatives in the area of higher learning exploded in the late 1950's and early 1960's post-sputnik and civil rights eras and in the later part of the 1970's policies towards higher learning tended to stabilize and to decrease in importance as a federal issue. In the decade of the 1980's many states will be facing several dilemmas in supporting higher learning. In 1981 over thirty states are experiencing stringency in state budgets and pressures to reduce state spending in almost all areas. Simultaneously, collegiate enrollments continue to expand as they absorb unemployed workers seeking to improve their skills. The dilemma now is that expanded enrollments require expanded state financial support. During the last decade, student assistance programs became the fastest growing area of support for higher learning and are now tempting targets for budget reduction. However, the rapidly increased expenditures were not directed solely to the poor but largely to students from the middle and upper income groups. The dilemma now is that those pressing for a balanced federal

budget and reduced state expenditures are the new-found beneficiaries of grant and interest subsidy student aid programs.

The rationale behind some of the new funds in student assistance was to assist independent institutions to compete for students. Nearly 80 percent of all college students in public institutions, versus 50 percent thirty years ago, future student assistance and public expenditure policies will affect public institutions a more, and more directly, than independent institutions. Ironically, when independent institutions have the greatest concern for their fiscal survival the public funding instruments are the least sensitive to their special plight.

Federal and state constitutions charge state governments with the primary responsibility for public policy toward formal learning in the United States. As suggested in Table I, state governments are also charged with the responsibilities for creation and supervision of the organizations responsible for performing the various roles of higher learning. Colleges and universities are all chartered by state governments either through their constitutions, specific enabling statutes, or under the provisions of not-for-profit corporation statutes enacted by states. All not-for-profit corporations are incorporated under the provision of state law and report to the states under those provisions. Furthermore, all profit seeking organizations are also incorporated under the provisions of state law; some states are well known for lenient legal requirements of incorporation while others are more stricter in terms of financial reporting conditions.

States have the authority, but in general have not exercised it, to require much greater attention to be given to human capital accounting and reporting and to create a variety of fiscal and other incentives for greater human capital investment.

In addition to responsibility for the creation and charter supervision of those organizations responsible for higher learning, state governments also exercise a variety of other authorities which have a direct bearing on the provision of educational services. Within higher education, most states determine degree granting authority and determine directly or indirectly the program offerings within at least the public institutions and in many cases both public and independent institutions. States establish patterns of authority and accountability for institutional governance, management, resource use, student services, information provided to potential students, research priorities, staffing, admissions, pricing policies, student assistance, and a variety of other topics at its public institutions, which now enroll approximately 80 percent of individuals studying in the United States. State governments provide those funds necessary to accomplish state purposes and priorities, to operate institutions, and to provide student assistance both in the form of low prices and in terms of direct grants. State governments provide professional state licensure requirements to insure adequate skills to protect the interest of the public in a variety of critical professional areas. These licensure requirements are often translated into educational requirements or demonstrated competencies. State governments are responsible for the economic development of their state and the contribution that higher

learning plays in the development not only of vocational skills, but also of technology and its contribution to the quality of life in a state.

While these authorities and responsibilities exist for virtually all states, it is also fair to observe that very few states are able to exercise these responsibilities and authorities to their fullest or in the most productive ways. The economic restraints which many states experience in the early part of the 1980's are severe and greatly limit all of their activities. Many public priorities compete for legislative attention for scarce resources, and education is not first on the list of public priorities in most of our states. Comprehensive information is generally not available to state policy makers as they consider the inter-relationships among higher learning decisions and economic development, supporting institutions of higher education and of students attending higher education, professional licensure, profit and not-for-profit registration and reporting requirements, and unique state resources requiring new technologies for exploitation. To be more effective, states need a greater appreciation of the complex of activities which relate to higher learning and the contribution of those activities to the well being of the states' society and economy. To accomplish broader national objectives, the federal government needs to understand to some degree the same complexity operating at the state level and also to develop some clarity about the strategies which the federal government might use in relating to state governments in affecting their decisions.

Strategies for Implementing Federal Responsibilities

In spite of the normative distinctions I have attempted to draw between national interests and state responsibilities, federal responsibilities are whatever the Congress of the United States determines them to be. The challenge of the Executive Branch is to determine appropriate and efficient ways to implement their prescribed responsibilities. To understand the likely and appropriate roles of new information in and about the federal policy making and implementation process, it may be helpful to consider several strategies, some of which complement and other which compete, which the Executive Branch might evaluate in implementing its Congressionally directed responsibilities. These strategies are offered as extremes in their characterization, not to prejudge their acceptability but to illustrate their key assumptions. The following is a brief discussion of five possible strategies which, among others might be considered:

1. Say's Law

   Say's Law maintains, in essence, that supply will generate its own demand. In the case of policy-orientated research, one often assumes that the supply of good ideas will create a demand for their use. This strategy lies behind the use of demonstration projects, pilot tests, programs for diffusion, examples of exemplary practice, the publishing of papers, the hosting of conferences, the issuing of reports — all aimed at informing or demonstrating improved practice or the use of exceptional ideas which, if adopted by state or federal policy makers, will increase the effectiveness of public programs. Setting aside the question for the moment of whether or not improved practice has ever

actually been demonstrated by research, this strategy assumes a latent demand for policy makers searching and receptive for demonstrably good ideas and a concomitant research capacity to demonstrate that a new idea is "good".

2. Biggest Kid on the Block

In many ways the implementation of federal policy is a lot like the seat selection of a large gorilla: the size and influence of the federal government is so massive that it can do pretty much what it wants to do. However, formal authority for actions in most of higher learning resides with states, institutions or organizations, and not with the federal government. Much of what the federal government wishes to accomplish requires both the concurrence and active support of other organizations and of other governmental units. Therefore, the federal government has adopted a regulatory approach either to direct the decisions of institutions, states, and other organizations or to persuade these organizations to undertake actions congruent with federal purposes, independent of "states" own objectives. The race and sex composition of university faculties are of interest to the federal government, and federal regulatory agencies have prescribed certain patterns of employment which must be achieved or all federal funds will be threatened to be withheld to coerce institutional compliance. Fiscal coersion is also the method of implementing regulations dealing with occupational safety and health, access by the physically handicapped to programs and activities at each and every institution, the relative priorities given to different competitive

sports, faculty reporting of activities in which they are involved throughout the year, and numerous other activities. Enforcement through litigation is the technique followed, rather than offering resources to create incentives to accomplish the federal purposes.

3. Mainlining Fiscal Dependency

Although responsibilities among state and federal governments may be clearly divided in constitutional terms, the federal government has sought to harminize state interest with federal purposes by focusing resources. A typical pattern is for the federal government to focus a substantial amount of resources to initiate a new activity. The policy of the federal government is that the provision of any amount of federal resources in an activity carries with it the responsibility that all other resources should be used for the same purpose. As long as the recipient organization is dependent upon the federal resources to accomplish a shared purpose it must, perforce, conform to the federal requirements. For example, in the last decade Congress required that students may not receive federal student assistance if they are convicted of exercising their political rights of free speech and assembly. Currently, the federal policy is that those students receiving a need-based student grant cannot receive a merit award. However, any individual or family who is not in financial need may receive a merit award. If any part of a faculty member's appointment is funded out of a federal grant or contract, then the use of the remaining part of his or her time for consulting or other personal and professional activities is limited to federally approved

policies. From the federal perspective, the objective is to find that minimal amount of financial support which creates dependence upon the federal funds, and which then provides leverage by the federal government on all the organization's activities.

4. Purchase of Services from Higher Learning

A fourth strategy for exercising federal responsibilities is to enter into contracts for the purchase of services desired at agreed-upon prices with expectations of specified quality. Some examples where this is done include the purchase of contract research from colleges and universities, the management of defense laboratories and other federal establishments by institutions of higher learning, and the purchase of statewide planning services from state agencies or other units of state government. One implication of the nature of the contract is that other activities of the organization not covered by the contract are similarly independent of and unconstrained by policies imposed on the activities which are the subject of the contract. The federal approach has often been to require compliance of all activities of an organization regardless of whether all activities are supported by contractual funds or not. This has limited the willingness of many organizations, expecially private corporations, to conduct business with the federal government.

5. The Federal Government as a Paradigm

It would be reasonable to expect that the federal government's own activities in the area of higher learning would be a paradigm whose

excellence would set a high standard for all concerned in higher learning, and that this paradigm would manifest the accomplishment of all the federal objectives, including: equal access for all eligible individuals; full information for appropriate individual decision making; efficient and effective resource management; cost-effective teaching technologies; adequate diversity in federal activities themselves; optimal use of government and private institutions; reinforcement of minority institutions; and the myriad of other federal objectives. I believe that state leaders will respond very favorably to examples by the federal government of efficiency and greater effectiveness in the areas of higher learning. State legislatures have no desire to waste money or to accomplish meaningless ends, and the proof of better alternatives demonstrated by the Federal government would certainly increase interest by all those with responsibility for establishing public policy towards higher learning.

Possible Contributions of the National Institute of Education/Department of Education to Increased Federal and State Effectiveness in Higher Learning

The previous sections have tried to suggest a framework for thinking about the roles of higher learning, the types of organizations responsible for the fulfillment of those roles, some of the divisions of responsibility between state and federal levels and policy, and some of the strategies which the federal government might consider and use in the implementation of federal policy decisions. Within this context, let me suggest several possible contributions of the National Institute

of Education (NIE) in the area of research about the financing higher learning in cooperation with state governments.

The first area is the investment of "public goods" which has been the classic rationale for federal research support in a variety of fields including policy research. In this regard, I believe it is important to distinguish between (1) research on activities of the higher learning industry, ie. knowldedge transmission, knowledge creation, adult socialization, and the holding pattern for aspiring workers, and (2) research on the policy making process in higher learning at the Federal, state, local, institutional, departmental, and individual levels. It is important to distinguish these two types of research because the first, research on higher learning activities, does not need have a client or application in mind to guide its utility whereas the second type of research, research on policy making, is best organized by client and by application. It is also important to distinguish between these two types of research because the widely differing willingness and ability of policy makers to pay for each type. Policy makers at all levels either on their own or in consortium should be willing to pay for policy oriented research, provided that research addresses the decisions for which they are responsible. However, to sponsor research on the general activities of higher learning offers little incentive for any organization except major foundations or private industry in the learning technology industry.

The higher learning industry would most likely benefit from a substantial increase of attention on the first type of research. Basic

research on the processes of higher learning are perhaps best organized by traditional disciplines, but particular promise may lie in emphasizing the biochemistry and biophysics of knowledge transmission and storage of memory in the human mind. Meanwhile, responsibility for research that is about the policy process could best be served by NIE focusing on the federal process to inform better the thoughtful federal managers in the choice of structure and strategies about which they must decide. It is unlikely that federally conceived, sponsored, and administered research on the policy making process will be of significant utility to other levels of government or to institutions of higher learning.

A second area of potential contribution by NIE is the improvement in the use of federal policy instruments to accomplish better the national purposes identified by Congress. In its concern about education qua education, the federal government has focused more on elementary and secondary levels than on the postsecondary level, perhaps because the federal role at the postsecondary level has been more procedural than substantive. However, with over 3 million individuals in its civilian labor force and nearly a 3 million more in the military services, the federal government's own responsibilities for knowledge and skill transmission, knowledge creation, adult socialization and other roles of higher learning is very high. NIE might be able to contribute to an understanding of an increased effectiveness by which these roles are conducted within the federal government. The federal labor force and military combined is greater in population than the adult population of most of the states of the United States. The effectiveness with which

the federal government addresses the higher learning needs of its own large, adult population is worthy of attention, research, and improvement all on its own. If all of the funds available in the postsecondary education finance program of NIE were directed to this purpose, it would be still be a very modest investment.

In addition to the concern for substantive skill development and knowledge transmission, the federal purposes include: the use of higher learning as an instrument in the production of basic research and many fields; the use of student assistance to provide desired patterns of social mobility and entry into the profession for those groups which have been historically disadvantaged; and to maintain certain institutions which with the force of market events would otherwise close but because of politically prominent administrators or faculty, there is a federal decision to sustain at federal expense. The conduct of all these activities are only generally and imcompletely understood. As long as these objectives remain significant in federal priorities, it would be important for NIE to gain a greater understanding of the contribution that federal programs, policies and funds make in these areas.

A third possible contribution which NIE might make to the general discussion would be to use its interest in a topic as a "good housekeeping seal of approval" to legitimate the discussion of policy topics or alternative policy options at the federal and state levels. Senior policy makers can only focus on a small number of important topics in all areas of their responsibility, and in education in

particular. By identifying one or two new topics every several years, NIE could provide a special impetus for policy makers to consider seriously those topics. NIE could identify some process to select the topics which they want to emphasize, and I am sure that everyone's list would be different. Some examples I would offer now would include:

— The decade of the 1980's may be the best chance between 1940 and 2000 to improve the quality of higher learning as a priority higher than increasing the quantity of services provided.

— An increased productivity of one to two percent per year is a legitimate expectation of trustees of institutions of higher learning.

— The net price of higher education has been driven too low by the federal government and this leads people to under-value higher education significantly. Institutions of higher education and state governments should be encouraged to raise their real prices charged students.

— The depreciation of the cost of higher education incurred by individuals and additional incentives for investment in employees by firms should be encouraged by federal tax law.

— There is a pending shortage of youth which will have extremely negative consequences for the economy, for the military, and for new energy in the American endeavor. Historically institutions of higher learning have served primarily those who have excelled in prior academic accomplishments or who have high employment motivation. In the future our society may need to learn how to motivate individuals and assist those who have previously not excelled.

The NIE can select one or two topics annually to begin a multi-year process to initiate their discussion — not to sponsor definitive research, because no such research will be definitive, and not to prescribe model legislation or model policy for state governments to adopt, but to initiate discussion among concerned policy makers.

Attending to these three areas would provide NIE with a large and challenging agenda for useful support of research activities. So much needs to be done and public funds are limited now and for the forseeable future that clear priorities are needed to have any real impact.